Lab 9. Analysis of revenue in sales dataset

i) Create a choropleth map (fill the map) to spot the special trends to show the state revenue.
ii) Create a line chart to show the revenue based on the month of the year.
iii) Create a bin of size 10 for the age measure to create a new dimension to show the revenue.
iv) Create a donut chart view to show the percentage of revenue per region by creating zero access in the calculated field.
v) Create a butterfly chart by reversing the bar chart to compare female & male revenue based on product category.
vi) Create a calculated field to show the average revenue per state & display profitable & non-profitable state.
vii) Build a dashboard.

vi) Create a calculated field to show the average revenue per state & display profitable & non-profitable state.

To create a calculated field that shows the average revenue per state and categorize each state as profitable or non-profitable, we shall create two measures:

1. one to calculate the average revenue per state and
2. Another, to categorize each state as profitable or non-profitable based on a defined threshold.

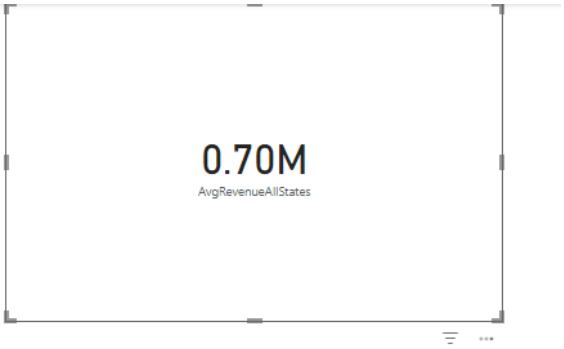
Step 1: Calculate Average Revenue Per State

1. **Go to the Data/Fields Pane**:
    - In Power BI, locate the table that contains your `Revenue` and `State` columns.
2. **Create a New Measure for Average Revenue Per State**:
    - Right Click and select **New Measure**.
    - In the formula bar, type the following DAX formula to calculate the average revenue per state and press Enter key.

```
Average Revenue Per State = AVERAGE('Sheet1'[Revenue])
```

3. Display Average Revenue Per State on a Card

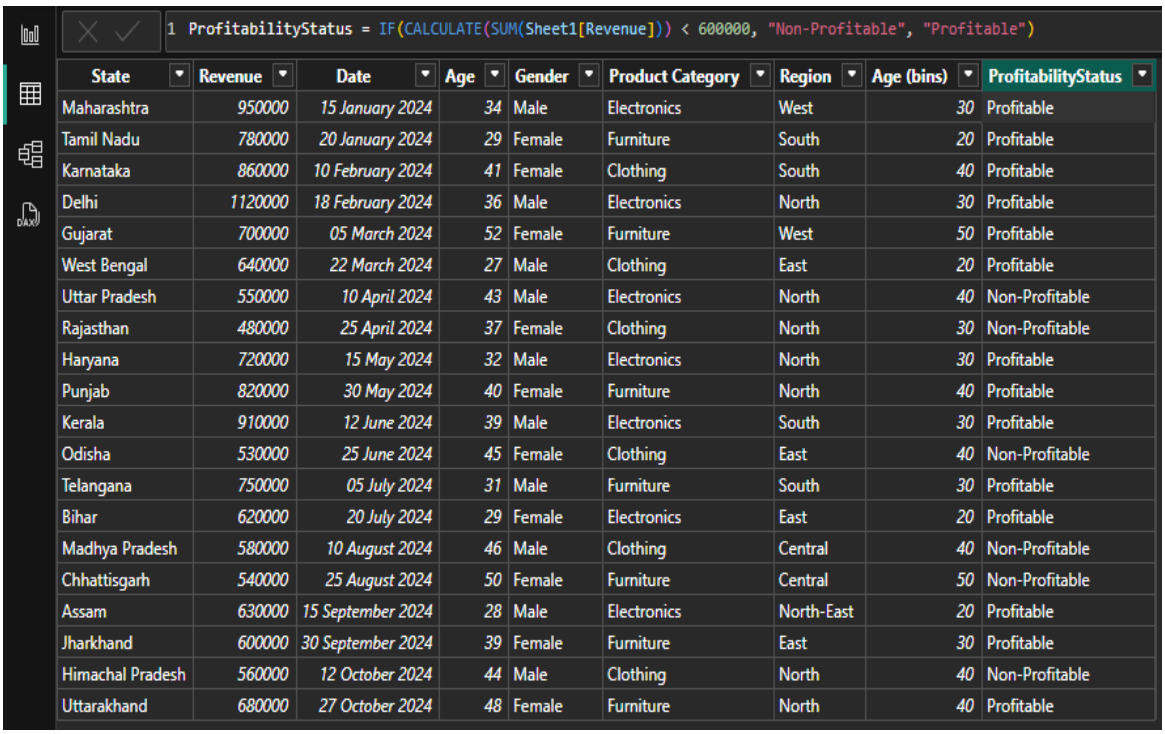
1. Go to the **Report View**.
2. From the **Visualizations** pane, select the **Card** visual.
3. Drag the **Average Revenue Per State** measure to the **Fields** section of the Card visual.
4. Format the Card to display the revenue neatly.



4. Create a Calculated Field to Identify Profitable and Non-Profitable States

1. In the **Home Tab, Select → New Column**.
2. Enter the following formula:

```
Profitability = IF(Sheet1[Revenue] < 600000, "Non-Profitable", "Profitable")
```



State	Revenue	Date	Age	Gender	Product Category	Region	Age (bins)	ProfitabilityStatus
Maharashtra	950000	15 January 2024	34	Male	Electronics	West	30	Profitable
Tamil Nadu	780000	20 January 2024	29	Female	Furniture	South	20	Profitable
Karnataka	860000	10 February 2024	41	Female	Clothing	South	40	Profitable
Delhi	1120000	18 February 2024	36	Male	Electronics	North	30	Profitable
Gujarat	700000	05 March 2024	52	Female	Furniture	West	50	Profitable
West Bengal	640000	22 March 2024	27	Male	Clothing	East	20	Profitable
Uttar Pradesh	550000	10 April 2024	43	Male	Electronics	North	40	Non-Profitable
Rajasthan	480000	25 April 2024	37	Female	Clothing	North	30	Non-Profitable
Haryana	720000	15 May 2024	32	Male	Electronics	North	30	Profitable
Punjab	820000	30 May 2024	40	Female	Furniture	North	40	Profitable
Kerala	910000	12 June 2024	39	Male	Electronics	South	30	Profitable
Odisha	530000	25 June 2024	45	Female	Clothing	East	40	Non-Profitable
Telangana	750000	05 July 2024	31	Male	Furniture	South	30	Profitable
Bihar	620000	20 July 2024	29	Female	Electronics	East	20	Profitable
Madhya Pradesh	580000	10 August 2024	46	Male	Clothing	Central	40	Non-Profitable
Chhattisgarh	540000	25 August 2024	50	Female	Furniture	Central	50	Non-Profitable
Assam	630000	15 September 2024	28	Male	Electronics	North-East	20	Profitable
Jharkhand	600000	30 September 2024	39	Female	Furniture	East	30	Profitable
Himachal Pradesh	560000	12 October 2024	44	Male	Clothing	North	40	Non-Profitable
Uttarakhand	680000	27 October 2024	48	Female	Furniture	North	40	Profitable